

### **REMARKS**

Claims 1-31 are present in this application. Claims 1, 14, 27, 29, and 31 are independent.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

### **General Statement Regarding Office Action**

The prior art rejection made in the Office Action is presented in an unusual format. Also, the prior art rejection does not present a *prima facie* case of obviousness, and is thereby improper. In particular, references are cited in the body of the rejection for teaching specific claimed elements, without being cited in the statement of rejection, without providing reasons for combining the references, and/or without properly taking Official Notice.

In addition, it is unclear to Applicant whether references listed in the body of the rejection based on prior art are intended to support the statements of Official Notice. Applicant requests clarification as to whether the Examiner takes Official Notice of specific facts, or if the rejections are based on cited references. **In the case that the Examiner takes Official Notice, Applicant hereby requests supporting references.**

### **§ 112, second paragraph, Rejection**

Claims 3, 6, 8, 10-12, 16, 17, and 21-26 have been rejected under 35U.S.C. 112, second paragraph, as being incomplete for omitting essential elements. Applicant respectfully traverses this rejection.

The Examiner rejects claims under 35 U.S.C. 112, second paragraph, as “omitting” essential elements, and cites MPEP § 2172.01. Applicant notes that it may be that the Examiner actually intended to reject the claims as failing to “interrelate” essential elements of the invention as defined by applicant in the specification.

### Claim 3

Claim 3 further defines the electronic seal of claim 1, and further includes a communication request section. (see also, specification at page 39, lines 12-21). The Examiner appears to believe that the claim fails to recite how the communication request ID relates to the encryption decryption operations of the electronic seal. Applicant submits that the features of claim 3 would be understood by one of ordinary skill in the art.

According to the present specification, the communication request section 52 sends the communication request read by the reading section 52B to request the card 6 for communication. Thus, one of ordinary skill would understand how the communication request ID recited in claim 3 is related to the electronic seal.

### Claim 6

Claim 6 further defines the electronic seal of claim 1 (e.g., Fig. 9A). The Examiner indicates that the relationship between the determination key and determined mode is unclear.

Claim 6 recites a combination of structural elements, including “a determination key for determining on the selected mode.” Applicant submits that one of ordinary skill in the art would understand that “determined mode” is the mode determined by pressing the determining key (page 3, lines 11-13).

### Claim 8

Claim 8 further defines the electronic seal of claim 1 to further include an initial setting mode section and a registered seal mode section (e.g., Fig. 8). The Examiner asserts that claim 8 does not recite how the registered seal mode is related to claim 1, or how the registered seal mode registers or is registered.

The present specification explains that the registered seal mode section 172 outputs the public key stored in the electronic seal by the initial setting mode section 171 to the card 9 for registration processing (specification at page 63, lines 19-22).

#### Claim 16

Claim 16 recites that a start signal is generated by and outputted from a start signal generation section. The Examiner asserts that claim 16 fails to show a relationship between elements. Applicant disagrees.

The claim recites that the start signal is generated by and outputted from a start signal generation section when the communication request ID inputted from an external device (e.g., electronic seal) matches the communication request ID stored in the communication request ID memory section. (see also, specification at page 46, line 21 – page 47, line 10). Thus, Applicant submits that claim 16 does recite a relationship between elements.

#### Claims 10, 11, 12

The Examiner asserts that claims 10, 11, and 12 fail to recite structural relationships between the external device of claim 16 and the electronic seal of claim 1. Claims 10, 11, and 12 are directed to multi-modal aspects of the electronic seal. Claim 10 recites a period setting mode section, claim 11 recites a time setting mode section, and claim 12 recites a sum setting mode section.

Applicant submits that claims 10 to 12 recite “an external device” because the claims relate to additional features of the electronic seal, not the memory medium. Applicant submits that the rejection is in error.

#### Claims 21-26

The Examiner rejects claims 21-26 for the same reasons as claims 8, 9, 10, 11, and 12. The same explanation above for claims 8-12 applies to claims 21-26.

Summary

Applicant submits that the present claims, when interpreted in view of the specification and drawings, would be understood by one of ordinary skill in the art and subsequently clearly define the metes and bounds of the claimed subject matter. Applicant requests that the rejection be reconsidered and withdrawn.

**§ 103(a) Rejection – Schneier, White**

Claims 1-31 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier “Applied Cryptography” pages 41-44 (Schneier) and How Computers Work by Ron White (White). Applicant respectfully traverses this rejection.

Applicant submits that the rejection fails to establish *prima facie* obviousness. For example, the rejection admits that Schneier fails to teach decryption and encryption of a random number, and comparison. Instead, the rejection merely refers to an example, U.S. Patent 5,481,611, which discloses comparison to a random number. However, claim 1 requires encryption and decryption of the random number by the same device. To the contrary, the rejection admits that Schneier fails to disclose any hardware to implement the method. Applicant submits that White’s general explanation of computers fails to make up for the deficiency in Schneier. This same argument applies as well to claim 27.

Furthermore, a statement that modifications of the prior art to meet the claimed invention would have been “well within the ordinary skill of the art at the time the claimed invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish *prima facie* obviousness without some objective reason to combine the teachings of the references. (M.P.E.P. § 2143.01(IV))

In addition, it is impermissible simply to engage in hindsight reconstruction of the claimed invention, using applicants’ structure as a template and selecting elements from references to fill the gaps. *In re Gorman*, 18 USPQ2d 1885 (Fed. Cir 1991). Also, simplicity and

hindsight are not proper criteria for resolving obviousness. *In re Warner*, 379 F.2d 1011, 154, USPQ 173 (CCPA 1967).

As the Examiner has failed to present an objective reason to combine teachings of the references, and uses the applicant's structure as a template, Applicant submits that the rejection fails to establish *prima facie* obviousness. Applicant requests that the rejection be reconsidered and withdrawn.

The rejection fails to establish *prima facie* obviousness for claim 14, as it states that claim 14 is rejected for the same reasons as claim 1. Claims 1 and 14 recite different elements, as claim 1 is directed to an "electronic seal" (e.g. 5), whereas claim 14 is directed to a "memory medium" (e.g. 6).

The rejection fails to establish *prima facie* obviousness for claim 31. The rejection does not provide specific reasons for rejecting claim 31.

Claims 29 and 30 are directed to a mobile device including an electronic seal. For example, the present invention discloses a mobile device 120 including an electronic seal, and the mobile device 120, for example, an cellular phone (see Figure 12B and page 84, line 14- page 85, line 8).

The rejection asserts that independent claims 29 and 30 are rejected in view of Official Notice. In particular, the rejection states that a conventional SIM card ("electronic seal") placed inside a conventional cellular phone is used to authenticate the user of the phone to the cellular network. In other words, the rejection asserts that claims 29 and 30 read on such conventional SIM card and conventional cellular phone. Applicant disagrees.

Although a SIM card may be inserted into a cellular phone to allow a user to connect to the communication network so as to make, e.g., phone calls, such SIM card does not correspond to the electronic seal disclosed by the present invention and as recited in claim 29. In particular, a conventional SIM card does not teach the following features recited in claim 29:

- An input/output section for receiving a random number encrypted based on a prescribed key; and
- An advance authentication processing section for decrypting the encrypted and received random number based on a secret key related to the prescribed key and then encrypting the decrypted random number based on the secret key,
- Wherein the input/output section outputs the encrypted random number encrypted based on the secret key.

It appears that the Examiner to simply assumes that a conventional SIM card teaches all the features of the electronic seal recited in claim 29 because a SIM card can be inserted into a phone to connect to the communication network. Applicant submits that such an assumption is unsupported by facts, and thereby fails to establish *prima facie* obviousness. Accordingly, Applicant requests that the rejection of claims 29 and 30 be reconsidered and withdrawn.

In addition, the Office Action cites two references, USP 6,669,487 and USP 6,631,840, as examples for teaching claims 29 and 30. However, the Office Action does not particularly explain where these references disclose all the features of claims 29 and 30. Therefore, at least for this additional reason, the rejection fails to establish *prima facie* obviousness.

Applicant submits that the cited references fail to disclose claims 29 and 30.

**Conclusion**

In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact **Robert Downs** Reg. No. 48,222 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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